

07.28.2016

Comments on NPRM RM-11708

To
FCC

From
Michael D. Adams

Re
RM-11708

Comments:

I write in response to the NPRM released today in proceeding RM-11708. The Commission requests input on several points.

1. I agree that technological advancements have eliminated the need for a symbol rate restriction. The current limits are obsolete and serve as an impediment to amateur experimentation, as well as a restriction on the potential for amateurs to use modern digital modes such as PACTOR 4 for public emergency communications support.
2. While I concur with the Commission's opinion that a 2.8kHz bandwidth restriction on data modes would also potentially limit experimentation and future technical developments, I am concerned that simply removing the symbol rate limit without additional changes invites future interference issues due to shared use of limited spectrum by amateurs with varying interests.

For example, how long will it be before an amateur chooses to attempt a 100kHz high-speed data transmission, potentially consuming all the authorized data spectrum on a particular band? Such a transmission would seem foolish today, due to the 300 baud limit; however, if the limit were lifted...someone might find it tempting to experiment. Such an effort, while interesting would undoubtedly create interference for other users of the spectrum, including those who specialize in exploring the efficiency of very narrow and/or weak-signal modes.

A bandwidth restriction would be consistent with how amateur radio transmissions are regulated in other countries.

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However, if the Commission chooses to avoid imposing any bandwidth limits, perhaps some thought should be given to amending Part 97 to specify that amateur stations must use the minimum bandwidth necessary for the desired communication, analogous to the requirement in 97.313(a) that amateur stations use the minimum power necessary.

While a "minimum bandwidth" standard could provide minimally sufficient guidance to govern competing data modes in the amateur radio spectrum, I still fear that increased interest in data modes will lead to an increased level of complaints claiming harmful interference.

3. I therefore ask the Commission to consider if the reduced demand on its enforcement duties would offset and harm in future technological advancement arising from imposing a 500Hz bandwidth restriction for portions of data subbands below the frequencies authorized for use by automatically controlled digital stations (ACDS).

A 500Hz bandwidth restriction below the ACDS frequencies would be consistent with international regulatory practice, be consistent with the incompatibility between narrow- and wide-band transmissions due to interference concerns, and recognize that those particular frequencies are frequently heavily used by a variety of mostly narrow-band transmissions, while still leaving some spectrum available for the use of and experimentation with wider-signals.

Respectfully submitted,



Michael D. Adams